

Appl. No. : 09/836,674
Filed : April 16, 2001

REMARKS

Applicant respectfully requests the Examiner to reconsider the above-captioned application in view of the above amendments and the following remarks.

Claim Rejections

Claims 1-18 and 22-25 stand rejected under 35 U.S.C. 102(b) as being anticipated by Suntola (U.S. Patent No. 6,015,590). Claims 19-21 stand rejected under 35 U.S.C. 103(a) as being unpatenable over Suntola in view of Soinen et al (U.S. 5,855,680). Claim 26 stands rejected under 35 U.S.C. 103(a) as being unpatenable over Suntola in view of Mochizuki et al (U.S. Patent No. 5,166,092).

With respect to independent Claim 1 and Claims 2-19 and 21-26, Applicant respectfully traverses the rejection of these claims. Nevertheless, to advance prosecution, Applicant has chosen to amend these claims. Applicant reserves the right to pursue these claims in their original or similar form in a continuing application.

As amended, Claim 1 recites, a "method for growing a thin film on a surface of a substrate in a reaction chamber having a single substrate according to the ALD method, said method comprising: feeding a pulse of a first vapor phase reactant exclusively into said reaction chamber; reacting the first vapor phase reactant with said surface of said single substrate to form a thin film on said substrate, wherein residual first vapor phase reactant remains in said reaction chamber; and feeding a pulse of a second vapor phase reactant exclusively into said reaction chamber, wherein said second vapor phase reactant reacts with said residual first vapor phase reactant to form a solid reaction product in said reaction chamber."

In contrast, Suntola discloses a reactor with "in-parallel stacked reaction chambers 13." Col. 9, lines 24-25. As such, Suntola does not disclose a method for growing a thin film on a substrate as recited in Claim 1. For at least this reason, Applicant respectfully submits that Claim 1 is in condition for allowance. Claims 2-19 and 21-28 depend upon allowable Claim 1 and for, at least this reason, are also in condition for allowance.

With respect to Claim 20, Applicant respectfully transverses the rejection of this claim, which has been rewritten into independent form including all of the limitations of original Claim 1.

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The Examiner states that the "combination Suntola et al. and Soininen et al. teaches undesired film growth occurs on other surfaces of a reaction chamber which can be replaced, this reads on applicant's discardable substrate." However, at Col. 8, lines 42-45, Soininen et al stated that "points where undesired film growth occurs, *namely the other surfaces of the reaction chamber pack than the substrate surfaces*, must be subjected at regular intervals to surface cleaning from grown film or the contaminated parts must be replaced by new ones." (emphasis added) As such, Soininen et al. actually teaches away from using a substrate for depositing undesired film growth. For at least this reason, Applicant respectfully submits that the rejection of Claim 20 is in error.

New Claim

Applicant has added new Claim 35 which is also in condition for allowance because, *inter alia*, it depends upon allowable Claim 1.

CONCLUSION

For the foregoing reasons, it is respectfully submitted that the rejections set forth in the outstanding Office Action are inapplicable to the present claims. Accordingly, early issuance of a Notice of Allowance is most earnestly solicited.

The undersigned has made a good faith effort to respond to all of the rejections in the case and to place the claims in condition for immediate allowance. Nevertheless, if any undeveloped issues remain or if any issues require clarification, the Examiner is respectfully requested to call Applicant's attorney in order to resolve such issue promptly.

Respectfully submitted,

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